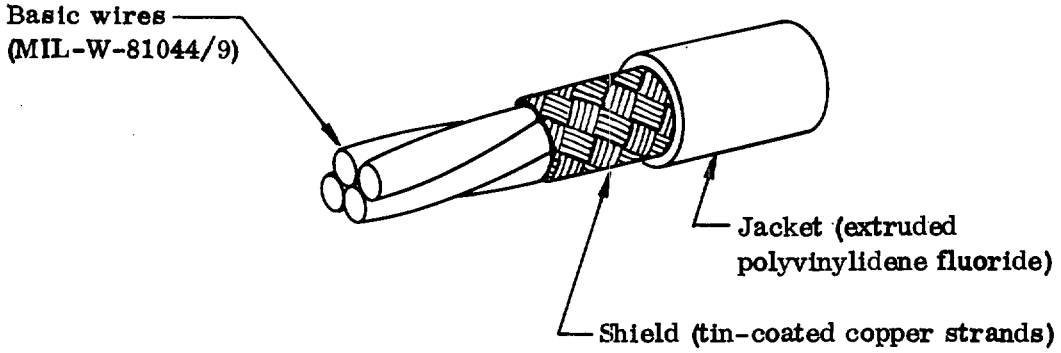
MIL-C-7078/1A
12 August 1970
SUPERSEDING
MIL-C-7078/1(AS)
19 August 1968

MILITARY SPECIFICATION SHEET

(A) CABLE, ELECTRIC, AEROSPACE VEHICLE, MIL-W-81044/9 BASIC WIRES, COPPER SHIELD, POLYVINYLIDENE FLUORIDE JACKET, 600-VOLT, 110° C

This specification is mandatory for use by all Departments and Agencies of the Department of Defense.

The complete requirements for procuring the cable described herein shall consist of this document and the issues in effect of Specification MIL-C-7078 and Specification Sheet MIL-W-81044/9.



SHIELDED JACKETED CABLE

REQUIREMENTS:
CONSTRUCTION DETAILS: See above Figure and Table I
VOLTAGE RATING: 600 Volts (rms)
TEMPERATURE RATING: 110° C (230° F), max conductor temperature
WET DIELECTRIC TEST AFTER COLD BEND:
Required: Test voltage, 1000 volts (rms)
THERMAL SHOCK TEST: Required. Test temperature, 150 ±2° C (302 ±3.6° F)
HEAT RESISTANCE: Required. Test temperature, 135 ±2° C (275 ±3.6° F)
Supplementary wet dielectric test not required
JACKET FLAWS (SPARK TEST): 1500 volts (rms)
DRY DIELECTRIC: 1500 volts (rms)

(A) denotes changes

FSC 6145

PART NUMBER: Part numbers in this specification sheet are coded as in the following example:

M7078/1	-	24	-	1
specification sheet number		size number of basic wire		quantity of conductors (basic wires) in cable

TABLE I (A)

Cable part no.	Gage of shield strands (AWG)	Thickness of extruded jacket (in.)(min)	Major diameter of shielded jacketed cable (in.)(max)	Weight of shielded jacketed cable (lb/1000 ft)	
				(nom.) 1/	(max)
M7078/1-24-1	38	.0055	.092	7.4	7.8
M7078/1-24-2	36	.0055	.152	13.9	14.6
M7078/1-24-3	↓	.0055	.161	18.0	18.9
M7078/1-24-4		.0055	.175	22.0	23.2
M7078/1-24-5		.0065	.193	26.6	28.0
M7078/1-24-6		.0065	.210	30.7	32.3
M7078/1-24-7		.0065	.210	33.5	35.3
M7078/1-22-1	36	.0055	.105	10.2	10.7
M7078/1-22-2	↓	.0055	.170	17.4	18.3
M7078/1-22-3		.0055	.180	22.9	24.1
M7078/1-22-4		.0065	.199	28.9	30.4
M7078/1-22-5		.0065	.218	34.4	36.2
M7078/1-22-6		.0075	.239	40.5	42.6
M7078/1-22-7		.0075	.239	44.6	46.9
M7078/1-20-1	36	.0055	.113	12.4	13.0
M7078/1-20-2	↓	.0055	.186	21.6	22.7
M7078/1-20-3		.0065	.199	29.4	30.9
M7078/1-20-4		.0065	.218	36.6	38.5
M7078/1-20-5		.0075	.241	44.5	46.8
M7078/1-20-6		.0075	.263	51.9	54.6
M7078/1-20-7		.0075	.263	57.6	60.6
M7078/1-18-1	36	.0055	.123	15.6	16.4
M7078/1-18-2	↓	.0065	.208	28.1	29.6
M7078/1-18-3		.0065	.221	38.3	40.3
M7078/1-18-4		.0075	.244	48.8	51.4
M7078/1-18-5		.0075	.268	58.9	62.0
M7078/1-18-6		.0075	.293	69.2	72.8
M7078/1-18-7		.0075	.293	77.3	81.4

TABLE I (Continued) Ⓐ

Cable part no.	Gage of shield strands (AWG)	Thickness of extruded jacket (in.)(min)	Major diameter of shielded jacketed cable (in.)(max)	Weight of shielded jacketed cable (lb/1000 ft)	
				(nom.) 1/	(max)
M7078/1-16-1	36	.0055	.133	18.3	19.3
M7078/1-16-2	↓	.0065	.228	33.5	35.3
M7078/1-16-3	↓	.0075	.244	46.6	49.0
M7078/1-16-4	↓	.0075	.269	59.0	62.1
M7078/1-16-5	↓	.0075	.295	71.3	75.1
M7078/1-16-6	↓	.0075	.323	84.1	88.5
M7078/1-16-7	↓	.0075	.323	94.3	99.3
M7078/1-14-1	36	.0055	.152	25.0	26.3
M7078/1-14-2	↓	.0065	.266	46.6	49.0
M7078/1-14-3	↓	.0075	.285	65.6	69.0
M7078/1-14-4	↓	.0075	.314	83.8	88.2
M7078/1-14-5	↓	.0075	.347	102.0	107.4
M7078/1-14-6	↓	.0075	.380	120.7	127.1
M7078/1-14-7	↓	.0075	.380	136.4	143.6
M7078/1-12-1	36	.0055	.170	33.5	35.3
M7078/1-12-2	↓	.0075	.304	64.1	67.5
M7078/1-12-3	↓	.0075	.324	90.6	95.4
M7078/1-12-4	↓	.0075	.358	116.7	122.8
M7078/1-12-5	↓	.0075	.395	142.7	150.2
M7078/1-12-6	↓	.0075	.434	169.6	178.5
M7078/1-12-7	↓	.0075	.434	192.7	202.8
M7078/1-10-1	36	.0065	.202	48.5	51.1
M7078/1-10-2	↓	.0075	.364	92.9	97.8
M7078/1-10-3	↓	.0075	.389	132.9	139.9
M7078/1-10-4	↓	.0075	.430	172.1	181.2
M7078/1-8-1	36	.0075	.264	79.8	84.0
M7078/1-8-2	↓	.0075	.484	153.8	161.9
M7078/1-6-1	36	.0075	.315	118.8	125.1
M7078/1-4-1	36	.0075	.372	174.7	183.9
M7078/1-2-1	36	.0100	.462	274.3	288.7
M7078/1-0-1	36	.0100	.556	406.4	427.8

1/ Nominal values for weight of shielded jacketed cable are given for information only. Nominal values are not requirements.

Custodians:
Navy - AS
Army - EL

Preparing activity:
Navy - AS
(Project No. 6145-0502)

Review activities:
Navy - EC, OS
Army - EL, MI
DSA - IS

User activities:
Army - AV, MU

Review/user information is current as of the date of this document. For future coordination of changes to this document, draft circulation should be based on the information in the current Federal Supply Classification Listing of DOD Standardization Documents.

SPECIFICATION ANALYSIS SHEET

Form Approved
Budget Bureau No. 22-R255

INSTRUCTIONS: This sheet is to be filled out by personnel, either Government or contractor, involved in the use of the specification in procurement of products for ultimate use by the Department of Defense. This sheet is provided for obtaining information on the use of this specification which will insure that suitable products can be procured with a minimum amount of delay and at the least cost. Comments and the return of this form will be appreciated. Fold on lines on reverse side, staple in corner, and send to preparing activity. Comments and suggestions submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or serve to amend contractual requirements.

SPECIFICATION: CABLE, ELECTRIC, AEROSPACE VEHICLE, MIL-W-81044/9
MIL-C-7078/1A BASIC WIRES, COPPER SHIELD, POLYVINYLIDENE FLUORIDE JACKET, 600-VOLT, 110° C

ORGANIZATION

CITY AND STATE

CONTRACT NUMBER

MATERIAL PROCURED UNDER A

☐ DIRECT GOVERNMENT CONTRACT ☐ SUBCONTRACT

1. HAS ANY PART OF THE SPECIFICATION CREATED PROBLEMS OR REQUIRED INTERPRETATION IN PROCUREMENT USE?

A. GIVE PARAGRAPH NUMBER AND WORDING.

B. RECOMMENDATIONS FOR CORRECTING THE DEFICIENCIES

2. COMMENTS ON ANY SPECIFICATION REQUIREMENT CONSIDERED TOO RIGID

3. IS THE SPECIFICATION RESTRICTIVE?

☐ YES ☐ NO *(If "yes", in what way?)*

4. REMARKS *(Attach any pertinent data which may be of use in improving this specification. If there are additional papers, attach to form and place both in an envelope addressed to preparing activity)*

SUBMITTED BY *(Printed or typed name and activity - Optional)*

DATE

DD FORM 1 JAN 66 1426

REPLACES EDITION OF 1 OCT 64 WHICH MAY BE USED.